

## 4 Hazardous Materials Research

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### Field Research at Selected Installations

Numerous hazardous materials are used to support the operations carried out at military installations. From Baker's field interviews, it became apparent that utilization of a centralized hazardous materials (HazMat) storage, tracking, and disposal system is common practice. At both MacDill and Pax River, the center responsible for these functions is known as the HazMat Pharmacy (HMP). Incoming materials are bar coded and scanned into the Environmental Management Information System (EMIS), or other similar system, and are tracked by net fluid ounce. The EMIS system transfers accountability from HMP to "customers" upon material distribution. The implementation of such tracking systems has been a recent addition to the data management systems at the bases visited, and some "bugs" are still being worked out. Despite these problems, information is updated every day and is current. The HMP's customers must submit a usage log (e-mail, fax, paper) and/or return empty containers) to demonstrate that they have used all the material before they can be issued more. This helps track hazardous materials usage "cradle to grave." Other programs link into the hazardous materials database to generate hazardous materials usage reports and provide SARA 312/313 reporting information.

It could be beneficial to link these hazardous materials databases into a CADD/GIS

system to be able to graphically present the distribution of hazardous materials with the facility at any given point in time.

### EPA's Envirofacts Warehouse

Baker reviewed EPA's Envirofacts Warehouse ([www.epa.gov/envirofacts](http://www.epa.gov/envirofacts)) to assist in determining what fields should be included in the TSFMS database. However, a module specific to hazardous material storage and management is not being maintained. Although a Toxic Release Inventory (TRI) module is available, it only maintains information about facility releases and transfers of toxic chemicals and compounds to the environment. No attributes from the Envirofacts Warehouse were identified for incorporation into the TSFMS.

### DESCIM Data Models

One DESCIM data model was reviewed and evaluated (HSMO0035.pdf) for compliance-related tables and attributes that could be incorporated into the TSFMS. Numerous attributes were identified as being potentially applicable to the TSFMS, and were included in the proposed structure.

## **Patuxent River ENRMS Module of the APMM**

Pax River's ENRMS module database was reviewed with respect to hazardous material management. Items from this database that were applicable to the TSFMS data structure were identified and included.

## **Other Information Sources**

Baker also reviewed the following documents to identify data elements for potential inclusion into the TSFMS. These documents include:

- a.* U.S. Army, Alaska. Environmental Handbook.